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LEYDIG VOIT & MAYER, LTD
TWO PRUDENTIAL PLAZA, SUITE 4900
180 NORTH STETSON AVENUE
CHICAGO, IL 60601-6780

EXAMINER

BODDIE, WILLIAM

ART UNIT PAPER NUMBER

2629

DATE MAILED: 10/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/664,320	Applicant(s) HIGGINSON, TIMOTHY B.	
	Examiner William Boddie	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,7-13,47-51,54-61,63-70,73,74,81-91 and 93-97 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,7-13,47-51,54-61,63-70,73,74,81-91 and 93-97 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In an amendment dated, July 24th, 2006, the Applicant amended claims 1, 4, 50, 51, 60-61, 66, 69-70, cancelled claims 3, 5-6, 14-46, 52-53, 62, 71-72, 75-80 and 92, and added new claims 96-97. Currently claims 1-2, 4, 7-13, 47-51, 54-61, 63-70, 73-74, 81-91, 93-97 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1-2, 4 and 7-13 have been considered but are moot in view of the new ground(s) of rejection.
3. Applicant's further arguments filed July 24th, 2006 have been fully considered but they are not persuasive.
4. On page 15 of the Amendment, arguments are presented traversing the rejections of claims 47, 75, 81, and 93. The Applicant argues that 1) Maeda does not disclose a cursor control member and 2) that there is no suggestion to combine the memory storage aspects of Maeda into the device of Hoggarth.

With respect to the Applicant's claim that Maeda does not disclose a cursor control member, the Examiner disagrees.

Paragraph 15 of Maeda clearly discloses the use of the pen equipment as a stylus on a touch panel, which is clearly a cursor control member. As such Hoggarth and Maeda are obviously analogous art.

The Examiner also disagrees with the Applicant's assertion that there is no suggestion to combine Hoggarth and Maeda. As stated in the previous office action the motivation for doing so would have been to remove the need for additional storage

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devices such as floppy disks to transfer information, instead creating a dual-purpose device (Maeda, para. 3). While Hoggarth does not require a memory to function the addition of an accessible memory to the device would add additional functionality, and address a problem that Maeda has presented. As such there is sufficient motivation to combine the two pieces of prior art.

5. On page 15 and 16, the Applicant traverses the rejections of claim 66. The Applicant contends that Miyashita discloses a large battery that functions as the primary power source for the device. The Applicant argues that such a battery is contrary to the Applicant's device, which houses a slender cursor control device with which the battery is merely to serve as a backup power source.

First addressing the issue with Miyashita's power supply size. Hoggarth's joystick is relied upon to disclose the elongate slender housing limitation as well as the majority of the other limitations in the claim. Miyashita is merely prior art evidence of including a power supply in a cursor control member such that the power supply supplies power to the main device when connected.

In other words, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to Applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which Applicant relies (i.e., power supply is a backup power source) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 4 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Thurston (US 5,630,756).

With respect to claim 1, Hoggarth discloses, an electronic device comprising:

a base (14 in fig. 1);

a display (16 in fig. 1);

a cursor control member including an elongate, slender, rigid housing (60 in fig. 4), the cursor control member having an attachment element arranged at one end of the housing for detachably fixing the cursor control member to the base (70 in fig. 4);

a port carried by the base for receiving the attachment element of the cursor control member (51 in fig. 4), the port including a movable surface (50 in fig. 4) that

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moves in response to movement of the cursor control member when the cursor control member is engaged with the port (col. 4, lines 7-15), movement of the movable surface producing control signals for directing movement of a cursor in the display (col. 4, lines 7-15).

wherein the cursor control member includes a manually operable input mechanism (button and trigger, 64, 80 in fig. 4), that produces control signals when operated, and the attachment element and port are configured so as to communicate the control signals to a processing unit (122 in fig. 4) in the base (col. 4, lines 61-67).

Hoggarth does not expressly disclose a manually operable input mechanism that includes a wheel.

Thurston discloses, a joystick (fig. 2) that includes a wheel (52 in fig. 2) as a manually operable input mechanism.

Thurston and Hoggarth are analogous art because they are both from the same field of endeavor namely, joysticks operable with a computer.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the wheel input means, taught by Thurston, on the joystick of Hoggarth.

The motivation for doing so would have been to allow control of game features that require a wheel with the same hand that controls other game features (Thurston; col. 4, lines 49-51).

Therefore it would have been obvious to combine Thurston with Hoggarth for the benefit of ease of use to obtain the invention as specified in claim 1.

With respect to claim 4, Hoggarth and Thurston disclose, the electronic device of claim 3 (see above).

Hoggarth further discloses, wherein the input mechanism comprises a button (80 in fig. 4; col. 5, lines 7-15).

With respect to claim 7, Hoggarth and Thurston disclose, the electronic device according to claim 1 (see above).

Hoggarth further discloses, wherein the attachment element of the cursor control member (70 in fig. 4) and the port (51 in fig. 4) have complementary configurations (clear from fig. 4) such that the cursor control member cannot rotate about its longitudinal axis relative to the movable surface of the base when the cursor control member is engaged with the port (as both are rectangular configurations it seems clear that the cursor control member will not be able to rotate about its longitudinal axis.).

With respect to claim 8, Hoggarth and Thurston disclose, the electronic device according to claim 1 (see above).

Hoggarth further discloses, wherein the attachment element of the cursor control member and the port have complementary guide surfaces which engage each other upon insertion of the cursor control member into the port and guide the attachment (col. 4, lines 38-41).

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Thurston (US 5,630,756) and further in view of May (US 6,509,890).

With respect to claim 2, Hoggarth and Thurston disclose the electronic device according to claim 1 (see above).

Neither Hoggarth nor Thurston expressly discloses the port is arranged on an adapter that is releasably connectable to the base.

May discloses, a TrackPoint® port on an adapter that is releasably connectable to the base (fig. 1, col. 2, lines 9-24).

Hoggarth, Thurston and May are all analogous art because they are all from the same field of endeavor namely removable cursor control devices for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to connect the joystick of Hoggarth and Thurston, to the TrackPoint® adapter of May. To further explain, TrackPoint® is used by both Hoggarth and May, thus making the combination even more clear.

One motivation for the above combination is to allow for two-handed manipulation (May, col. 1, lines 37-40).

Therefore it would have been obvious to combine Hoggarth and Thurston with May for the benefit of two-handed manipulation to obtain the invention as specified in claim 2.

9. Claims 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Thurston (US 5,630,756) and further in view of Langstraat et al. (JP 05/181,582).

With respect to claim 9, Hoggarth and Thurston disclose the electronic device according to claim 1 (see above).

Neither Hoggarth nor Thurston expressly disclose wherein an end of the cursor control member has a stylus tip.

Langstraat discloses, a cursor control member (112 in fig. 3) that comprises an end with a stylus tip (clear from fig. 3).

Langstraat, Hoggarth and Thurston are analogous art because they are all directed to removable cursor control devices for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to design the joystick cursor control of Hoggarth and Thurston to mimic the stylus design taught by Langstraat.

The motivation for doing so would have been to enable the cursor control member to operate as both a joystick as well as a stylus (Langstraat; para. 21).

Therefore it would have been obvious to redesign the shape of the Hoggarth and Thurston joystick to incorporate a stylus tip for the benefit of additional functionality to obtain the invention as specified in claim 9.

With respect to claim 13, Hoggarth and Thurston disclose the electronic device according to claim 1 (see above).

Neither Hoggarth nor Thurston expressly disclose including a storage slot on the base, the storage slot being configured to receive the cursor control member.

Langstraat discloses, a storage slot (118 in fig. 2) to receive a cursor control member (112 in fig. 2).

At the time of the invention it would have been obvious to one of ordinary skill in the art to design the joystick of Hoggarth and Thurston in such a way as to allow for the housing of the device in a storage slot, as taught by Langstraat.

The motivation for doing so would have been increased portability of the device as well as lessened chance of the user losing the cursor control member.

Therefore it would have been obvious to combine Langstraat with Hoggarth and Thurston for the benefit of portability to obtain the invention as specified in claim 13.

10. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Thurston (US 5,630,756) and further in view of Maeda et al. (JP 05/181,582).

With respect to claims 10 and 11, Hoggarth and Thurston disclose, the electronic device according to claim 1 (see above).

Hoggarth further discloses, adding more electrical contacts to facilitate additional functionality for the user (col. 5, lines 7-9).

Neither Hoggarth nor Thurston expressly discloses, wherein the cursor control member has a memory.

Maeda discloses, wherein a cursor control member (140 in fig. 3) has a memory (310 in fig. 3) and a port (380 in fig. 3) and an attachment element of the cursor control member (320 in fig. 3) are configured such that content stored in the memory of the cursor control member can be communicated to a processing unit (360 in fig. 3) in a base when the cursor control member is engaged with the port (para. 4).

With regards to claim 11, from paragraph 4 of Maeda it is clear that the memory of the pen is usable by the processor.

Hoggarth, Thurston and Maeda are all analogous art because they are all from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the electrical contacts and memory taught by Maeda as additional contacts in the cursor control member of Hoggarth and Thurston.

The motivation for doing so would have been to remove the need for additional storage devices such as floppy disks to transfer information, instead creating a dual-purpose device (Maeda, para. 3).

Therefore it would have been obvious to combine Hoggarth, Thurston and Maeda for the benefit of convenient data transmission to obtain the invention as specified in claims 10 and 11.

11. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Thurston (US 5,630,756) and further in view of Miyashita et al. (US 6,909,906).

With respect to claim 12, Hoggarth and Thurston disclose, the electronic device according to claim 1 (see above).

Hoggarth further discloses, adding more electrical contacts to facilitate additional functionality for the user (col. 5, lines 7-9).

Neither Hoggarth nor Thurston expressly discloses, wherein the cursor control member includes a power supply that supplies power to the base.

Miyashita discloses, a cursor control member (131 in fig. 2) including a power supply (105 in fig. 3) and a port (127 in fig. 2) and attachment element of the cursor control member (111 and 141 in fig. 4) configured such that power produced by the power supply in the cursor control member is available to operate the processing unit in the base when the cursor control member is engaged with the port (col. 6, lines 9-21).

Hoggarth, Thurston and Miyashita are all analogous art because they are all from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the electrical contacts and power supply taught by Miyashita as additional contacts in the cursor control member of Hoggarth and Thurston.

The motivation for doing so would have been to recharge the main power supply (Miyashita, col. 6, lines 9-21).

Therefore it would have been obvious to combine Hoggarth and Thurston with Miyashita for the benefit of lengthening the battery life of the base to obtain the invention as specified in claim 12.

12. Claims 47, 49-50, 57, 59-60, 81, 86-89 and 93-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Maeda et al. (JP 05/181,582).

With respect to claims 47, 57, 81 and 93, Hoggarth discloses, an electronic device (10 in fig. 1) comprising:

a base (14 in fig. 1) including a processing unit (122 in fig. 4);

a display (16 in fig. 1);

a cursor control member (60 in fig. 4) including:

a housing (62 in fig. 4),

an attachment element (70 in fig. 4), arranged at one end of the housing for detachably securing the cursor control member to the base, and

a port carried by the base for receiving the attachment element of the cursor control member (50 in fig. 4), the port being adapted to translate movement of the cursor control member into control signals for directing movement of a cursor in a display (col. 4, lines 7-15), when the cursor control member is engaged with the port (col. 4, lines 54-67).

Hoggarth does not expressly disclose, a memory being included in the cursor control member.

Maeda discloses, a memory (310 in fig. 3); and wherein a port (380 in fig. 3) and a attachment element (320 in fig. 3) of a cursor control member (140 in fig. 3) are configured such that content stored in the memory of the cursor control member can be communicated to a processing unit (360 in fig. 3) when the cursor control member is engaged with the port (para. 4).

Hoggarth and Maeda are analogous art because they are all from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the electrical contacts and memory taught by Maeda as additional contacts in the cursor control member of Hoggarth.

The motivation for doing so would have been to remove the need for additional storage devices such as floppy disks to transfer information, instead creating a dual-purpose device (Maeda, para. 3).

Therefore it would have been obvious to combine Hoggarth and Maeda for the benefit of convenient data transmission to obtain the invention as specified in claims 47, 57, 81 and 93.

With respect to claims 49 and 59, Hoggarth and Maeda disclose, the electronic device of claims 47 and 57 (see above).

Hoggarth further discloses, wherein the cursor control member includes a manually operable input mechanism (64 in fig .4) that produces control signals when operated and the attachment element and port are configured so as to communicate those control signals to a processing unit in the base (col. 4, lines 61-67).

With respect to claims 50 and 60, Hoggarth and Maeda disclose, the electronic device of claims 47 and 57 (see above).

Hoggarth further discloses, wherein the manually operable input mechanism comprises a button (80 in fig. 4; col. 5, lines 7-15).

With respect to claims 86-87, Hoggarth and Maeda disclose the electronic device of claim 47 (see above).

Hoggarth further discloses that the electronic device is a laptop personal computer (col. 1, lines 16-22).

With respect to claims 88-89, Hoggarth and Maeda disclose the electronic device of claim 47 (see above).

Hoggarth further discloses, a processing unit in the base (CPU; col. 1, lines 36-38), and a display in the base (LCD; col. 1, lines 31-35).

With respect to claim 94, Hoggarth and Maeda disclose, the electronic device of claim 93 (see above).

Hoggarth further discloses, wherein the cursor control member houses mechanical (64 and 80 in fig. 4) and electrical components (72 and 74 in fig. 4) for translating the physical manipulation (trigger and button press) of the cursor control member into signals corresponding to the cursor control signals transmitted by the port (col. 4, lines 61-67).

With respect to claim 95, Hoggarth and Maeda disclose, the electronic device of claim 94 (see above).

Hoggarth further discloses, wherein the port translates cursor control signals received from the cursor control member into the cursor control signals transmitted by the port (col. 4, lines 61-67).

13. Claims 66 and 68-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Miyashita et al. (US 6,909,906).

With respect to claim 66, Hoggarth discloses, an electronic device (10 in fig. 1) comprising:

a base (14 in fig. 1);

a display (16 in fig. 1);

a cursor control member including an elongate, slender, rigid housing (60 in fig. 4), the cursor control member having an attachment element arranged at one end of the housing (70-74 in fig. 4) for detachably fixing the cursor control member to the base (col. 4, lines 38-41);

a port carried by the base for receiving the attachment element of the cursor control member (50 in fig. 4), the port including a movable surface (50 in fig. 4) that moves in response to movement of the cursor control member when the cursor control member is engaged with the port (col. 4, lines 7-15), movement of the movable surface producing control signals for directing movement of a cursor in the display (col. 4, lines 54-60).

Hoggarth does not expressly disclose, a power supply in the cursor control member.

Miyashita discloses, a cursor control member (131 in fig. 2) including a power supply (105 in fig. 3) and a port (127 in fig. 2) and attachment element of the cursor control member (111 and 141 in fig. 4) configured such that power produced by the power supply in the cursor control member is available to operate the processing unit in the base when the cursor control member is engaged with the port (col. 6, lines 9-21).

Hoggarth and Miyashita are analogous art because they are all from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the electrical contacts and power supply taught by Miyashita as additional contacts in the cursor control member of Hoggarth.

The motivation for doing so would have been to recharge the main power supply (Miyashita, col. 6, lines 9-21).

Therefore it would have been obvious to combine Hoggarth with Miyashita for the benefit of lengthening the battery life of the base to obtain the invention as specified in claim 66.

With respect to claim 68, Hoggarth and Miyashita disclose, the electronic device of claim 66 (see above).

Hoggarth further discloses, wherein the cursor control member includes a manually operable input mechanism that produces control signals when operated and the attachment element and port are configured so as to communicate those control signals to a processing unit in the base (64 in fig. 4, col. 4, lines 61-67).

With respect to claim 69, Hoggarth and Miyashita disclose, the electronic device of claim 68 (see above).

Hoggarth further discloses, wherein the manually operable input mechanism comprises a button (80 in fig. 4; col. 5, lines 7-15).

14. Claims 48, 58 and 90-91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Maeda (JP 05/181,582) and further in view of May (US 6,509,890).

With respect to claims 48 and 58, Hoggarth and Maeda disclose the electronic device according to claims 47 and 57 (see above).

Neither Hoggarth nor Maeda expressly disclose the port is arranged on an adapter that is releasably connectable to the base.

May discloses, a TrackPoint® port on an adapter that is releasably connectable to the base (fig. 1, col. 2, lines 9-24).

Hoggarth, Maeda and May are all analogous art because they are all from the same field of endeavor namely removable cursor control devices for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to connect the joystick of Hoggarth and Maeda, to the base using the TrackPoint® adapter of May. To further explain, TrackPoint® is used by both Hoggarth and May, thus making the combination even more clear.

One motivation for the above combination is to allow for two-handed manipulation (May, col. 1, lines 37-40).

Therefore it would have been obvious to combine Hoggarth and Maeda with May for the benefit of two-handed manipulation to obtain the invention as specified in claims 48 and 58.

With respect to claims 90 and 91, Hoggarth and Maeda disclose, the electronic device of claim 47 (see above), wherein a two-dimensional array of keys is disposed upon a generally planar surface of the base (22 in fig. 1).

Neither Hoggarth nor Maeda, expressly disclose, the port being positioned distal from the keys or to the side of the keys.

May discloses, an adapter with a port on it. The adapter once attached orients the port at both a distal and a side position from the keys (figure 1).

15. Claims 51 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Maeda et al. (JP 05/181,582) and further in view of Fleck et al. (US 6,259,438).

With respect to claims 51 and 61, Maeda and Hoggarth disclose, the electronic device of claims 49 and 59 (see above).

Neither Maeda nor Hoggarth discloses, that the manually operable input mechanism includes a wheel.

Thurston discloses, a joystick (fig. 2) that includes a wheel (52 in fig. 2) as a manually operable input mechanism.

Thurston, Maeda and Hoggarth are analogous art because they are both from the same field of endeavor namely, multi-component hand-held cursor control members.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the wheel input means, taught by Thurston, on the cursor control member of Hoggarth and Maeda.

The motivation for doing so would have been to allow control of game features that require a wheel with the same hand that controls other game features (Thurston; col. 4, lines 49-51).

Therefore it would have been obvious to combine Thurston with Hoggarth and Maeda for the benefit of ease of use to obtain the invention as specified in claims 51 and 61.

16. Claims 54, 63 and 82-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Maeda (JP 05/181,582) and further in view of Miyashita et al. (US 6,909,906).

With respect to claims 54 and 63, Hoggarth and Maeda disclose, the electronic device according to claims 47 and 57 (see above).

Hoggarth further discloses, adding more electrical contacts to facilitate additional functionality for the user (col. 5, lines 7-9).

Neither Hoggarth nor Maeda expressly discloses, wherein the cursor control member includes a power supply that supplies power to the base.

Miyashita discloses, a cursor control member (131 in fig. 2) including a power supply (105 in fig. 3) and a port (127 in fig. 2) and attachment element of the cursor control member (111 and 141 in fig. 4) configured such that power produced by the power supply in the cursor control member is available to operate the processing unit in the base when the cursor control member is engaged with the port (col. 6, lines 9-21).

Hoggarth, Maeda and Miyashita are all analogous art because they are all from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the electrical contacts and power supply taught by Miyashita as additional contacts in the cursor control member of Hoggarth and Maeda.

The motivation for doing so would have been to recharge the main power supply (Miyashita, col. 6, lines 9-21).

Therefore it would have been obvious to combine Hoggarth and Maeda with Miyashita for the benefit of lengthening the battery life of the base to obtain the invention as specified in claims 54 and 63.

With respect to claims 82-84, Hoggarth and Maeda disclose, the electronic device of claim 47 (see above).

Miyashita discloses, a device that is a mobile phone that supports wireless voice, data, and telephone communications (col. 1, lines 7-11).

At the time of the invention it would have been obvious to use the cursor control member of Hoggarth and Maeda in the mobile phone of Miyashita.

The motivation for doing so would have been, to provide a portable information input apparatus and a portable device capable of improving the operability of data entry (May, col. 2, lines 35-38).

17. Claims 84 and 96-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Maeda (JP 05/181,582) and further in view of Aguilar et al. (US 6,628,266).

With respect to claim 84, Hoggarth and Maeda disclose, the electronic device of claim 47 (see above).

Neither Hoggarth nor Maeda disclose that the device is a mobile phone.

Aguilar discloses, a mobile phone (col. 1, lines 5-7) including joystick input device (14 in fig. 1) inserted in the base.

Aguilar, Hoggarth, and Maeda are analogous art because they are from the same field of endeavor namely, providing efficient portable cursor control devices.

At the time of the invention it would have been obvious to one of ordinary skill in the art to use the portable cursor control member of Hoggarth and Maeda in a mobile phone, as taught by Aguilar.

The motivation for doing so would have been to allow for a quick and convenient means for the user to interact with the mobile phone (Aguilar; col. 1, lines 40-45).

Therefore it would have been obvious to combine Aguilar with Hoggarth and Maeda for the benefit of convenient user interactions to obtain the invention as specified in claim 84.

With respect to claims 96 and 97, Hoggarth, Aguilar and Maeda disclose, the electronic device of claim 84 (see above).

Aguilar further discloses, wherein a two-dimensional array of keys is disposed upon a generally planar surface of the base (note the clear space for the keys in fig. 1), and wherein the joystick is positioned on the generally planar surface at a position that when the base is operatively oriented with respect to a user, is relatively distal to the user in relation to the array of keys (clear from fig. 1, that the location of the joystick is both distal and to the side of the key array).

18. Claims 55, 64 and 85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Maeda (JP 05/181,582) and further in view of Langstraat (US 2003/0076302).

With respect to claims 55 and 64, Hoggarth and Maeda disclose, the electronic device according to claims 47 and 57 (see above).

Neither Hoggarth nor Maeda expressly disclose a storage slot on the base for the cursor control member.

Langstraat discloses a storage slot on the base, the storage slot being configured to receive the cursor control member (118 in figs. 1-2).

Hoggarth, Maeda and Langstraat are all analogous art because they are both from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to construct the base and design of the cursor control member of Hoggarth and Maeda in a fashion similar to Langstraat.

The motivation for doing so would have been convenience for the user, lessening the likelihood of losing the cursor control member.

Therefore it would have been obvious to combine Langstraat with Hoggarth and Maeda for the benefit of user convenience to obtain the invention as specified in claims 55 and 64.

With respect to claim 85, Hoggarth and Maeda disclose, the electronic device of claim 47 (see above).

Langstraat discloses, wherein the electronic device is a PDA (fig. 1 and para. 2).

At the time of the invention it would have been obvious to replace the laptop of Hoggarth and Maeda with the PDA taught by Langstraat.

The motivation for doing so would have been for the smaller handheld size increasing portability (Langstraat, para. 2).

19. Claims 56 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Maeda et al. (JP 05/181,582) and further in view of May et al. (US 6,271,834).

With respect to claims 56 and 65, Hoggarth and Maeda disclose, the electronic device according to claims 47 and 57 (see above).

Neither Hoggarth nor Maeda expressly disclose, feedback signals to the device.

May discloses, wherein a processing unit (12 in fig. 1) of the base (10 in fig. 1) produces a second control signal (electrical signal, col. 4, lines 10-18) that controls movement of a cursor control member (movement of the cap, col. 4, lines 10-18) upon occurrence of a predetermined event (depressing joystick actuator, col. 4, lines 10-18) when the cursor control member is engaged with the port (fig. 4).

Hoggarth, Maeda and May are all analogous art because they are both from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include feedback as taught by May in the cursor control member of Hoggarth and Maeda.

The motivation for doing so would have been to overcome the tedious nature of clicking with a TrackPoint® control actuator (May, col. 2, lines 34-37).

Therefore it would have been obvious to combine May with Hoggarth and Maeda for the benefit of a more clear and lively clicking operation to obtain the invention as specified in claims 56 and 65.

20. Claim 67 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Miyashita (US 6,909,906) and further in view of May (US 6,509,890).

With respect to claim 67, Hoggarth and Miyashita disclose the electronic device according to claim 66 (see above).

Neither Hoggarth nor Miyashita expressly disclose the port is arranged on an adapter that is releasably connectable to the base.

May discloses, a TrackPoint® port on an adapter that is releasably connectable to the base (fig. 1, col. 2, lines 9-24).

Hoggarth, Miyashita and May are all analogous art because they are all from the same field of endeavor namely removable cursor control devices for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to connect the joystick of Hoggarth and Miyashita, to the base using the TrackPoint® adapter of May. To further explain, TrackPoint® is used by both Hoggarth and May, thus making the combination even more clear.

One motivation for the above combination is to allow for two-handed manipulation (May, col. 1, lines 37-40).

Therefore it would have been obvious to combine Hoggarth and Miyashita with May for the benefit of two-handed manipulation to obtain the invention as specified in claim 67.

21. Claims 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view Miyashita et al. (US 6,909,906). and further in view of Fleck et al. (US 6,259,438).

With respect to claim 70, Miyashita and Hoggarth disclose, the electronic device of claim 66 (see above).

Neither Miyashita nor Hoggarth disclose a manually operable input mechanism that includes a wheel.

Thurston discloses, a joystick (fig. 2) that includes a wheel (52 in fig. 2) as a manually operable input mechanism.

Thurston, Miyashita and Hoggarth are analogous art because they are both from the same field of endeavor namely, multi-component hand-held cursor control members.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the wheel input means, taught by Thurston, on the joystick of Hoggarth and Miyashita.

The motivation for doing so would have been to allow control of game features that require a wheel with the same hand that controls other game features (Thurston; col. 4, lines 49-51).

Therefore it would have been obvious to combine Thurston with Hoggarth and Miyashita for the benefit of ease of use to obtain the invention as specified in claim 70.

22. Claim 73 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Miyashita (US 6,909,906) and further in view of Langstraat (US 2003/0076302).

With respect to claim 73, Hoggarth and Miyashita disclose, the electronic device according to claim 66 (see above).

Neither Hoggarth nor Miyashita expressly disclose a storage slot on the base for the cursor control.

Langstraat discloses a storage slot on the base, the storage slot being configured to receive the cursor control member (118 in figs. 1-2).

Hoggarth, Miyashita and Langstraat are all analogous art because they are both from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to construct the base and design of the cursor control member of Hoggarth and Miyashita in a fashion similar to Langstraat.

The motivation for doing so would have been convenience for the user, lessening the likelihood of losing the cursor control member.

Therefore it would have been obvious to combine Langstraat with Hoggarth and Miyashita for the benefit of user convenience to obtain the invention as specified in claims 73.

23. Claim 74 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Miyashita (US 6,909,906) and further in view of May et al. (US 6,271,834).

With respect to claim 74, Hoggarth and Miyashita disclose, the electronic device according to claim 66 (see above).

Neither Hoggarth nor Miyashita expressly disclose, feedback signals to the device.

May discloses, wherein a processing unit (12 in fig. 1) of the base (10 in fig. 1) produces a second control signal (electrical signal, col. 4, lines 10-18) that controls movement of a cursor control member (movement of the cap, col. 4, lines 10-18) upon occurrence of a predetermined event (depressing joystick actuator, col. 4, lines 10-18) when the cursor control member is engaged with the port (fig. 4).

Hoggarth, Miyashita and May are all analogous art because they are both from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include feedback as taught by May in the cursor control member of Hoggarth and Miyashita.

The motivation for doing so would have been to overcome the tedious nature of clicking with a TrackPoint® control actuator (May, col. 2, lines 34-37).

Therefore it would have been obvious to combine May with Hoggarth and Miyashita for the benefit of a more clear and lively clicking operation to obtain the invention as specified in claims 74

Conclusion

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Will Boddie whose telephone number is (571) 272-0666. The examiner can normally be reached on Monday through Friday, 7:30 - 4:00 EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wlb
10/4/06

AMR A. AWAD
SUPERVISORY PATENT EXAMINER
